Abstract

The invention relates to a fuel injector with a pressure booster (3), which is supplied with fuel that is at high pressure from a pressure source (1). A work chamber (4) of the pressure booster (3) is separated from a differential pressure chamber (6) of the pressure booster (3) via a booster piston (5). The pressure relief and the subjection to pressure of the differential pressure chamber (6) of the pressure booster (3) are effected via a switching valve (22). This valve communicates with the differential pressure chamber (6) via a control line (10). A pressure chamber (12) on an injection valve member (13) communicates with a compression chamber (8) of the pressure booster (3) via a pressure chamber supply line (11). The switching valve (22) is embodied as a direct-switching 3/2-way valve, whose valve needle (23, 31) is pressure-balanced and has both a sliding seat (24) and a slide seal (25).

Fig. 1